

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,070	10/05/2000	Takeshi Morikawa	018656-186	7739
21839	7590 02/22/2006		EXAMINER	
BUCHANAN INGERSOLL PC			POON, KING Y	
(INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
			2624	
		•	DATE MAN ED 00/00/000	,

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Commons	09/679,070	MORIKAWA ET AL.				
Office Action Summary	Examiner	Art Unit				
	King Y. Poon	2625				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tim  rill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONEI	L. lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 18 Ja	Responsive to communication(s) filed on 18 January 2006.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-17</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>6</u> is/are allowed.						
6)⊠ Claim(s) <u>1-5 and 7-17</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner	Г.					
10)⊠ The drawing(s) filed on <u>05 October 2000</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
<ol> <li>Certified copies of the priority documents have been received.</li> </ol>						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the prior	-	d in this National Stage				
application from the International Bureau	, , , ,					
* See the attached detailed Office action for a list of	of the certified copies not receive	d.				
Marsh						
Attachment(s)	4) 🔲 Interview Summary (	(PTO-413)				
2) 🚺 Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	te				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 12/21/2005.	5) Notice of Informal Pa	atent Application (PTO-152)				

Art Unit: 2625

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 7-12, 14, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeHority (US 5,129,639) in view of Nagasaka (US 5,241,349) and Niikawa (US 4,925,325).

Regarding claim 1: DeHority teaches a printing system (fig. 1) including a printer (16, fig. 1) that operates in either a first operating environment (e.g., substitute, column 3, lines 40-45) and a second operating environment (e.g., strict requirement/notify me, column 3, lines 40-45) that is different from the first operating environment, the printing system comprising: a print parameter prohibiting means (the information in the control program, column 2, lines 65-68, that determines a mismatch, column 4, lines 20-25) that prohibits use of a printing parameter (e.g., a duplex requirement, column 4, lines 5-6) associated with a print job (column 3, line 23); a parameter determiner (the software that determines print job requirement that is mismatched, column 3, lines 29-40, fig. 2A, fig. 2B) that receives a print job and determines whether a printing parameter to be used in the print job is prohibited by the print parameter prohibiting means; and a controller

Art Unit: 2625

(20, fig. 1) that, when the parameter determiner determines that a printing parameter is prohibited (mismatch at 62, fig. 2B) prohibits processing of the print job (the print job is processed with a substitute parameter, not the prohibited print parameter, column 4, lines 30-40) using the print parameter prohibited.

DeHority does not teach the printer is operating in an on-line mode.

Niikawa, in the same area of printer, teaches it is well known in the art to provide an on-line mode such that the printer is communicating with a host and a off-line mode such that the printer is not used to communicate with the host (column 3, lines 24-30).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority to include: an on-line mode such that user is allowed to control the communication between the host computer and the conventional printer of Dehority, column 2, lines 44-50.

DeHority also does not teach an operating environment detector that determines whether the printer operating environment is a first environment being a first period of time or a second environment being a second time period, the second time period is not overlapping with the first time period.

Nagasaka, in the same area of printer (column 10, lines 23-27), it is well known in the art to provide printer with: an operating environment detector that determines whether the printer operating environment is a first environment being a first period of time or a second environment being a second time period, the second time period is not overlapping with the first time period (fig. 4, column 10, lines 17-22), such that power is being conserved.

Art Unit: 2625

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority to include: an operating environment detector that determines whether the printer operating environment is a first environment being a first period of time or a second environment being a second time period, the second time period is not overlapping with the first time period.

Note: after the modification of DeHority, the printer receiving print job from the host must be in the on-line mode and the processing of the print job of using a prohibited parameter must be prohibited in both detected periods of time which includes first period of time.

Regarding claim 2: DeHority teaches wherein the controller forcibly cancels the printing parameter that is prohibited and changes the parameter to another available printing parameter to perform the print job (column 4, line 31).

Regarding claim 7: Nagasaka teaches a designated that designates the first operating environment and the second operating environment (column 9, lines 12-25).

Regarding claim 8: Nagasaka teaches wherein the designator designates a time period (column 9, lines 12-25, column 10, lines 17-22, column 6, lines 40-43).

Regarding claim 9: Nagasaka teaches wherein the operating environment detector determines environment based on environment of network (the time zone of the network, fig. 4) to which the printer is connected.

Regarding claim 10: DeHority teaches wherein the print parameter prohibiting means operates according to a detection detected by a sensor (the device in the

Art Unit: 2625

processor that sense the right signal is called for, column 8, lines 13-15) located in the printer (16, fig. 1).

Regarding claim 11: DeHority teaches wherein the print parameter prohibiting means operates by a manual operation (a user/operator sets the printer configuration, column 4, lines 20-25; i.e., a user determines what is available in the printer) by a user.

Regarding claim 12: DeHority teaches wherein the print parameter prohibiting means is located in the printer (column 2, lines 50-69).

Regarding claim 14: DeHority teaches A print job management method of a printing system including a printer (16, fig. 1) that operates in either a first operating environment (e.g., substitute, column 3, lines 40-45) and a second operating environment (e.g., strict requirement/notify me, column 3, lines 40-45) that is different from the first operating environment, comprising steps of: setting a prohibit printing parameter (e.g., a duplex requirement, column 4, lines 5-6, associated with a print job cannot be performed by the printer, 46, fig. 2A) associated with a print job; determining (determining mismatch, fig. 2A, fig. 2B) whether a printing parameter to be used in the print job is prohibited; and prohibiting processing of the print job (the print job is processed with a substitute parameter, not the prohibited print parameter, column 4, lines 30-40) using the print parameter prohibited, when the determining step determines that a printing parameter is prohibited (mismatch 62, fig. 2B) and the detecting step detects that the environment is the first operating environment (best at 72, fig. 2B).

DeHority does not teach the printer is operating in an on-line mode.

Art Unit: 2625

Niikawa, in the same area of printer, teaches it is well known in the art to provide an on-line mode such that the printer is communicating with a host and a off-line mode such that the printer is not used to communicate with the host (column 3, lines 24-30).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority to include: an on-line mode such that user is allowed to control the communication between the host computer and the conventional printer of Dehority, column 2, lines 44-50.

DeHority also does not teach an operating environment detector that determines whether the printer operating environment is a first environment being a first period of time or a second environment being a second time period, the second time period is not overlapping with the first time period.

Nagasaka, in the same area of printer (column 10, lines 23-27), it is well known in the art to provide printer with: an operating environment detector that determines whether the printer operating environment is a first environment being a first period of time or a second environment being a second time period, the second time period is not overlapping with the first time period (fig. 4, column 10, lines 17-22), such that power is being conserved.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority to include: an operating environment detector that determines whether the printer operating environment is a first environment being a first period of time or a second environment being a second time period, the second time period is not overlapping with the first time period.

Art Unit: 2625

Note: after the modification of DeHority, the printer receiving print job from the host must be in the on-line mode and the processing of the print job of using a prohibited parameter must be prohibited in both detected periods of time which includes first period of time.

Regarding claim 15: DeHority teaches a printing system (fig. 1) including a printer, (16, fig. 1) comprising: an operating environment setting means (user's computer, column 3, lines 40-50, 10, fig. 1) that sets a first operating environment (e.g., substitute, column 3, lines 40-45) as the operating environment for the printer, as well as a second operating environment (e.g., strict requirement/notify me, column 3, lines 40-45) that is different from the first operating environment; a print parameter prohibiting means (the information in the control program, column 2, lines 65-68, that determines a mismatch, column 4, lines 20-25) that prohibits use of a printing parameter (e.g., a duplex requirement, column 4, lines 5-6) associated with a print job (column 3, line 23); a parameter determiner (the software that determines print job requirement that is mismatched, column 3, lines 29-40, fig. 2A, fig. 2B) that determines whether or not a printing parameter of a print job is prohibited by the print parameter prohibiting means; and a controller (20, fig. 1) that, when the parameter determiner determines that a printing parameter is prohibited (mismatch at 62, fig. 2B), executes a different print mode (the print job is processed with a substitute parameter, not the prohibited print parameter, column 4, lines 30-40) based on the determination by the operating environment detector (determines that best is to be used, 72, fig. 2B).

DeHority does not teach the printer is operating in an on-line mode.

Art Unit: 2625

Niikawa, in the same area of printer, teaches it is well known in the art to provide an on-line mode such that the printer is communicating with a host and a off-line mode such that the printer is not used to communicate with the host (column 3, lines 24-30).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority to include: an on-line mode such that user is allowed to control the communication between the host computer and the conventional printer of Dehority, column 2, lines 44-50.

DeHority also does not teach an operating environment detector that determines whether the printer operating environment is a first environment being a first period of time or a second environment being a second time period, the second time period is not overlapping with the first time period.

Nagasaka, in the same area of printer (column 10, lines 23-27), it is well known in the art to provide printer with: an operating environment detector that determines whether the printer operating environment is a first environment being a first period of time or a second environment being a second time period, the second time period is not overlapping with the first time period (fig. 4, column 10, lines 17-22), such that power is being conserved.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority to include: an operating environment detector that determines whether the printer operating environment is a first environment being a first period of time or a second environment being a second time period, the second time period is not overlapping with the first time period.

Note: after the modification of DeHority, the printer receiving print job from the host must be in the on-line mode and the processing of the print job of using a prohibited parameter must be prohibited in both detected periods of time which includes first period of time. DeHority teaches print job is not to be executed if a print parameter is prohibited (74, 78, fig. 2B). Nagasaka teaches executes a different print mode based on the determination by the environment detector (fig. 4) if there are no print job to be executed.

Regarding claims 16, 17: Nagasaka teaches designating the first operating environment and the second operating environment (column 6, lines 40-45).

3. Claims 3, 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeHority and Nagasaka as applied to claim 1 above, and further in view of Tang et al (US 6,160,629).

Regarding claim 3: DeHority does not teach the controller forcibly deletes the print job including the printing parameter that is prohibited.

Tang, in the same area of printing, teaches deleting print job (note; a print job includes printing parameter) (column 4, lines 50-55).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority's printing system to include: the controller forcibly deletes the print job including the printing parameter prohibited.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority's printing system by the teaching of Tang because of the following reasons: (a) it would have prevented the printer from

Art Unit: 2625

running out of memory; and (b) it would have allowed the printer to function properly by having enough memories to store other useful print jobs.

Regarding claim 4: DeHority does not teach the controller goes on keeping the print job including the printing parameter that is prohibited.

Tang, in the same area of printing, teaches keeping a print job (note; a print job includes printing parameter) (column 4, lines 37-40).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority's printing system to include: the controller goes on keeping the print job including the printing parameter that is prohibited.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority's printing system by the teaching of Tang because of the following reasons: (a) it would have allowed the print job to be printed in the future, as taught by Tang at column 4, lines 37-40; and (b) it would have allowed the print job to be printed when the printer is configured to print the prohibited parameters in the future (column 4, lines 20-25, DeHority).

Regarding claim 5: DeHority teaches where a printing parameter is determined by the parameter determiner (the software that determines print job requirement that is mismatched, column 3,lines 29-40, fig. 2A, fig. 2B) to be prohibited the controller notifies a warning message (column 4, lines 25-27).

DeHority does not teach to display the warning message.

Art Unit: 2625

Tang, in the same area of printing, teaches it is well known to convey a message to a person is by displaying (column 5, lines 25-30).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority's printing system to include: display the warning message.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority's printing system by the teaching of Tang because of the following reasons: (a) it would have provided a fast and reliable way of sending the warning message to the operator.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeHority as applied to claim 1 above, and further in view of Hower, Jr. et al. (US 5,467,434).

Regarding claim 13: DeHority does not teach wherein the print parameter prohibiting means is a program installed in a computer that transfer the print job to the printer.

Hower, in the same area of print parameter prohibiting, teaches a print parameter prohibiting program (37, fig. 2, column 7, lines 25-55) that is installed in a computer (15-1, fig. 2) that transfer the print job to a printer (column 3, lines 35-50).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority's printing system to include: wherein the print parameter prohibiting means is a program installed in a computer that transfer the print job to the printer.

Application/Control Number: 09/679,070 Page 12

Art Unit: 2625

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified DeHority's printing system by the teaching of Hower, Jr. et al. because of the following reasons: (a) it would have reduced the work load of the printer processor such that the printer processor would allocate more time to process the print job to speed up the printing process; and (b) it would have increase the usable life of the printer/processor by reducing the work load of the printer.

## Allowable Subject Matter

5. Claim 6 is allowed.

## Response to Arguments

6. Applicant's arguments filed 1/18/2006 have been fully considered but they are not persuasive.

With respect to applicant's argument that claims 1, 14, 15 is claiming subject matter of "printing an on-line print job with prohibited parameters [and the prohibited parameters] is prevented when it is outside the time frame set to normal business hour, has been considered.

In reply: None of claims 1, 14, 15 is claiming printing an on-line print job with prohibited parameters [and the prohibited parameters] is prevented when it is outside the time frame set to normal business hour. For example, claiming 1 is claiming: a) determining two different time period; b) determining a print job having a prohibited print

Art Unit: 2625

parameter; and c) in the situation that it is determined that it is a first time period and the print job is having a prohibited printing parameter, prohibit processing the print job using the prohibited parameter. The claim does not concern any other situation such as: what happen of the print job during first time period and the parameter is not prohibited, what happen of the print job during second time period and the parameter is prohibited, etc.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The examiner combined DeHority with Niikawa for online printing. Since DeHority, fig 1, and column 2, lines 45-60 already teaches a printer that received print jobs from other computers through the use of a network, examiner simply uses Niikawa, column 3, lines 24-30 teaches that a printer that receives print jobs from other computers is generally regarded as on-line in the printing art.

Nagasaka teaches a printer (DeHority's invention is a printer), is a power/energy consuming apparatus (column 1, lines 15-25). Nagaska further teaches a better method of allowing the printer owner to save money by conserving the usage of power by determining two period of time (the time between 8 am to 6 pm and other time) and set the printer to a low sleep mode or off sleep mode.

Since conserving power is the duty of a good citizen in this country, it would have been obvious to a person with ordinary skill in the art that owns a DeHority's printer

Application/Control Number: 09/679,070 Page 14

Art Unit: 2625

would like the print be able to conserve power. Therefore it would have been obvious to a person with ordinary skill in the art to have modified DeHority by the teaching of Nagasaka's power saving method (after reading Nagasaka, column 2, lines 5-10) because it would have saved the user tremendous amount of effort and money for doing research to come up with a power saving method by the user; saving power is good for the world at the same time saving money for the user.

After the modification, the printer of DeHority must be able to: a) receive print job in the on-line mode, b) DeHority's printer would continue to determine prohibit parameter (column 3,lines 29-40, fig. 2A, 2B DeHority) in the received print job in the on-line mode because it is DeHority's invention; and c) determining two time period- one time period to set the printer in sleep mode and another time period to set the printer in low sleep mode (fig. 4, Nagasa, column 4, lines 45-55).

Since step b) must happened in either of the two time period determined; it follows the situation that it is determined that it is a first time period (e.g., 8am to 6pm) and the print job is having a prohibited printing parameter. Clearly, the print job with the prohibited printing would not be processed according to DeHority under such situation (column 4, lines 30-40, DeHority).

7. **THIS ACTION IS MADE** FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

Application/Control Number: 09/679,070 Page 15

Art Unit: 2625

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/16/06

KING Y. POON PRIMARY EXAMINED